

SECRET  
(900)

### III. Environmental Setting

ORIGINAL  
(Red)

## Geology and Soils

### Geology

The Ametek facility is located just north of the Piedmont Coastal Plain Fall Zone. The site is underlain by the Wilmington complex which consists of felsic and mafic gneiss and minor schists in the areas of the site. To the south of the site, at the northern edge of the Atlantic Coastal Plain is the Potomac formation which is a cretaceous, nonmarine formation which consists of schists and clays with interbedded quartz sands and some gravel.<sup>1</sup>

### Soils

Soils at the site consists of the Manor-Glenelg-Chester-Urban land complex and the Othello - Fallsington Urban land complex. The Manor-Glenelg-Chester-Urban complex consists of level to sloping Manor, Glenelg and Chester soils that have been used for residential or other community purposes. The Othello-Fallsington-Urban land complex consists of poorly drained, nearly level Othello and Fallsington soils that have been used for residential, commercial and industrial development.<sup>2</sup>

### Ground Water

Depth to ground water in the area of the site is approximately 5 feet and is expected to flow east towards Red Clay Creek.<sup>7</sup>

### Surface Water

The site is adjacent to the Red Clay Creek. The Red Clay Creek originates in Pennsylvania and discharges into the Christina River approximately 2 miles south of the site. The Red Clay Creek has been plagued with pesticides, PCB and zinc contamination. Currently EPA, Delaware DNREC and Pennsylvania DER are working on a memorandum of understanding to address these problems.<sup>5</sup>

### Land Use

Land use in the area is industrial and residential<sup>5</sup>.

### Population Distribution

The site is on the western edge of the city of Newport. According to the 1980 census Newport had a population of 1167.<sup>6</sup>

#### IV. Preliminary Assessment Form



POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT  
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE 02 SITE NUMBER  
DE

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site) Ametek, Inc.		02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER 900 Greenbank Rd.			
03 CITY Wilmington	04 STATE DE	05 ZIP CODE 19899	06 COUNTY New Castle	07 COUNTY CODE	08 CONG DIST
09 COORDINATES LATITUDE _____		LONGITUDE _____			
10 DIRECTIONS TO SITE (Starting from nearest public road) From the intersection of Rt. 41 + Rt. 2, follow Rt. 2 west approximately 1/4 mile and make a u-turn onto Rt. 2 East. Turn right onto Greenbank Road immediately after u-turn and follow this road back to Ametek, Inc.					

III. RESPONSIBLE PARTIES

01 OWNER (If known) Haveg Industries, Inc.		02 STREET (Business, mailing, residential) 900 Greenbank Road			
03 CITY Wilmington	04 STATE DE	05 ZIP CODE 19808	06 TELEPHONE NUMBER (302) 656-9881		
07 OPERATOR (If known and different from owner)		08 STREET (Business, mailing, residential)			
09 CITY	10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER ( )		
13 TYPE OF OWNERSHIP (Check one) <input checked="" type="checkbox"/> A. PRIVATE <input type="checkbox"/> B. FEDERAL: _____ (Agency name) <input type="checkbox"/> C. STATE <input type="checkbox"/> D. COUNTY <input type="checkbox"/> E. MUNICIPAL <input type="checkbox"/> F. OTHER: _____ (Specify) <input type="checkbox"/> G. UNKNOWN					
14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply) <input checked="" type="checkbox"/> A. RCRA 3001 DATE RECEIVED: ____/____/____ MONTH DAY YEAR <input type="checkbox"/> B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: ____/____/____ MONTH DAY YEAR <input type="checkbox"/> C. NONE					

IV. CHARACTERIZATION OF POTENTIAL HAZARD

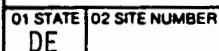
01 ON SITE INSPECTION <input type="checkbox"/> YES DATE ____/____/____ MONTH DAY YEAR <input type="checkbox"/> NO		BY (Check all that apply) <input type="checkbox"/> A. EPA <input type="checkbox"/> B. EPA CONTRACTOR <input type="checkbox"/> C. STATE <input type="checkbox"/> D. OTHER CONTRACTOR <input type="checkbox"/> E. LOCAL HEALTH OFFICIAL <input type="checkbox"/> F. OTHER: _____ (Specify) CONTRACTOR NAME(S): _____			
02 SITE STATUS (Check one) <input checked="" type="checkbox"/> A. ACTIVE <input type="checkbox"/> B. INACTIVE <input type="checkbox"/> C. UNKNOWN		03 YEARS OF OPERATION BEGINNING YEAR _____ ENDING YEAR _____ <input type="checkbox"/> UNKNOWN			
04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED Asbestos fibers have been detected in downstream samples of the Red Clay Creek which lies adjacent to Ametek. Also asbestos emissions are suspected as result of inadequate baghouse systems.					
05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION Potential hazard to soil, groundwater, surface water and/or population through the presence of asbestos fibers.					

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents) <input type="checkbox"/> A. HIGH (Inspection required promptly) <input checked="" type="checkbox"/> B. MEDIUM (Inspection required) <input type="checkbox"/> C. LOW (Inspect on time available basis) <input type="checkbox"/> D. NONE (No further action needed, complete current disposition form)			
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VI. INFORMATION AVAILABLE FROM

01 CONTACT Brad L. Smith		02 OF (Agency Organization) Delaware DNREC PA/SI Group		03 TELEPHONE NUMBER (302) 323-4560	
04 PERSON RESPONSIBLE FOR ASSESSMENT Deborah Dewsbury		05 AGENCY DNREC	06 ORGANIZATION PA/SI	07 TELEPHONE NUMBER (302) 323-4560	08 DATE 2 / 18 / 88 MONTH DAY YEAR





POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

04 NARRATIVE DESCRIPTION

Potential groundwater contamination from asbestos spillage.

01 ☐ B. SURFACE WATER CONTAMINATION

02 ☐ OBSERVED (DATE: Nov 85)

☐ POTENTIAL

☒ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

04 NARRATIVE DESCRIPTION

Documented surface water contamination of asbestos recorded in Nov. 1985 NUS Field Trip Report.

01 ☒ C. CONTAMINATION OF AIR

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☒ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

04 NARRATIVE DESCRIPTION

Potential air contamination from asbestos fibers.

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

04 NARRATIVE DESCRIPTION

N/A

01 ☐ E. DIRECT CONTACT

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

04 NARRATIVE DESCRIPTION

N/A

01 ☐ F. CONTAMINATION OF SOIL

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☒ POTENTIAL

☐ ALLEGED

03 AREA POTENTIALLY AFFECTED: \_\_\_\_\_

(Acres)

04 NARRATIVE DESCRIPTION

Potential soil contamination from asbestos spillage.

01 ☐ G. DRINKING WATER CONTAMINATION

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

04 NARRATIVE DESCRIPTION

Potential drinking water contamination detected by asbestos in Red Clay Creek.

01 ☐ H. WORKER EXPOSURE/INJURY

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

03 WORKERS POTENTIALLY AFFECTED: \_\_\_\_\_

04 NARRATIVE DESCRIPTION

N/A

01 ☐ I. POPULATION EXPOSURE/INJURY

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

04 NARRATIVE DESCRIPTION

N/A



POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT  
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION  
01 STATE 02 SITE NUMBER  
DE

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

N/A

01 ☐ K. DAMAGE TO FAUNA  
04 NARRATIVE DESCRIPTION (Include name(s) of species)

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

N/A

01 ☐ L. CONTAMINATION OF FOOD CHAIN  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

N/A

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES  
(Spills/runoff/standing liquids/leaking drums)

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

04 NARRATIVE DESCRIPTION

Not observed

01 ☒ N. DAMAGE TO OFFSITE PROPERTY  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☒ POTENTIAL

☐ ALLEGED

There is a documented release of asbestos to Red Clay Creek which may be contributed to Ametek.

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

Possible contamination of sewers or storm drains by asbestos from poor housekeeping practices.

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

N/A

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

Possible hazard related to the use of furans.

III. TOTAL POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

IV. COMMENTS

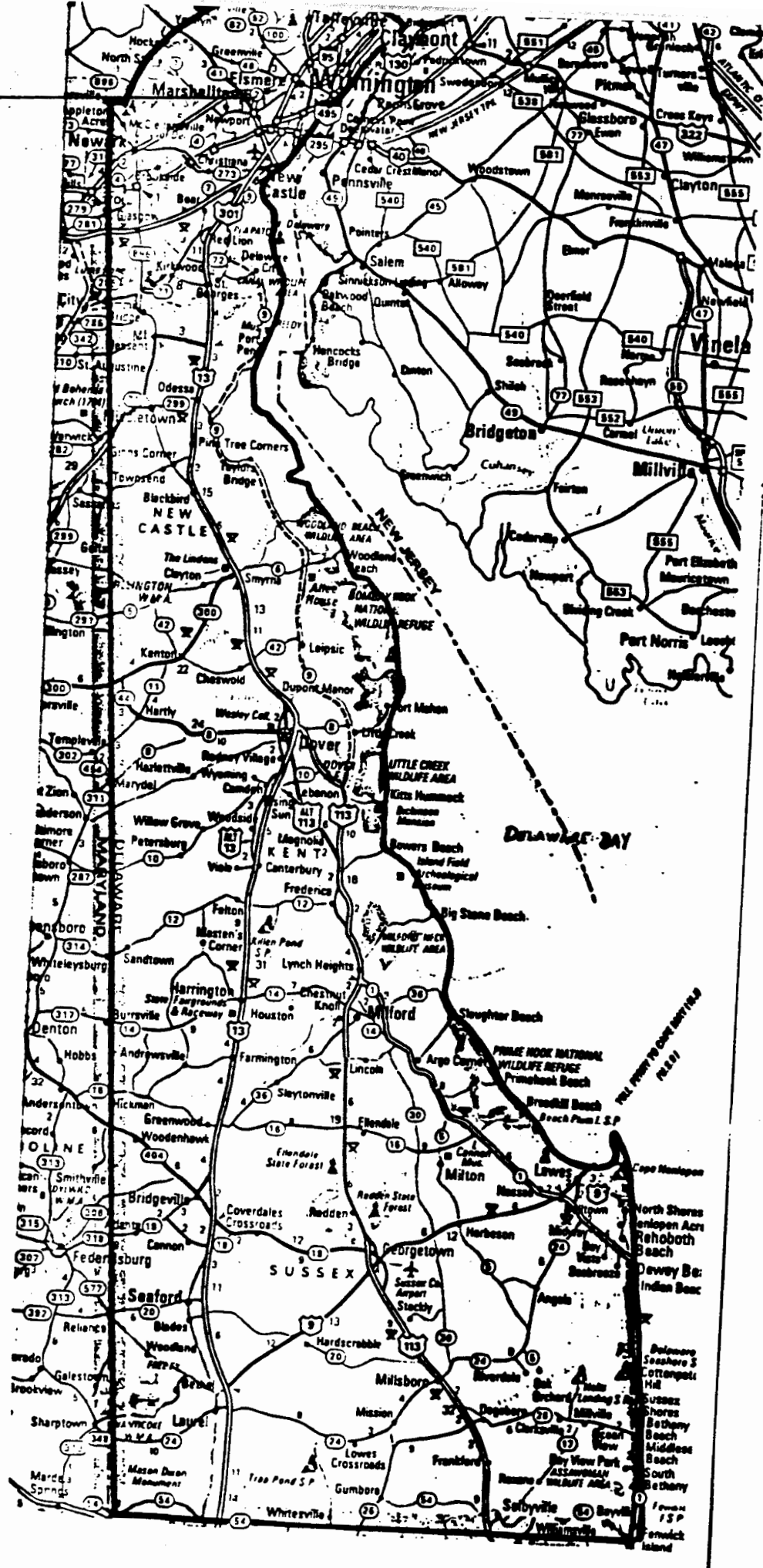
V. SOURCES OF INFORMATION (Cite specific references, e. g., state files, sample analysis, reports)

Delaware DNREC Air Resources Files.

ORIGINAL  
(0000)

## V. Maps and Drawings





NEWARK EAST QUADRANGLE  
DELAWARE-NEW CASTLE CO.  
7.5 MINUTE SERIES (TOPOGRAPHIC)

5843 1 SE  
(WILMINGTON NORTH)

40' 443

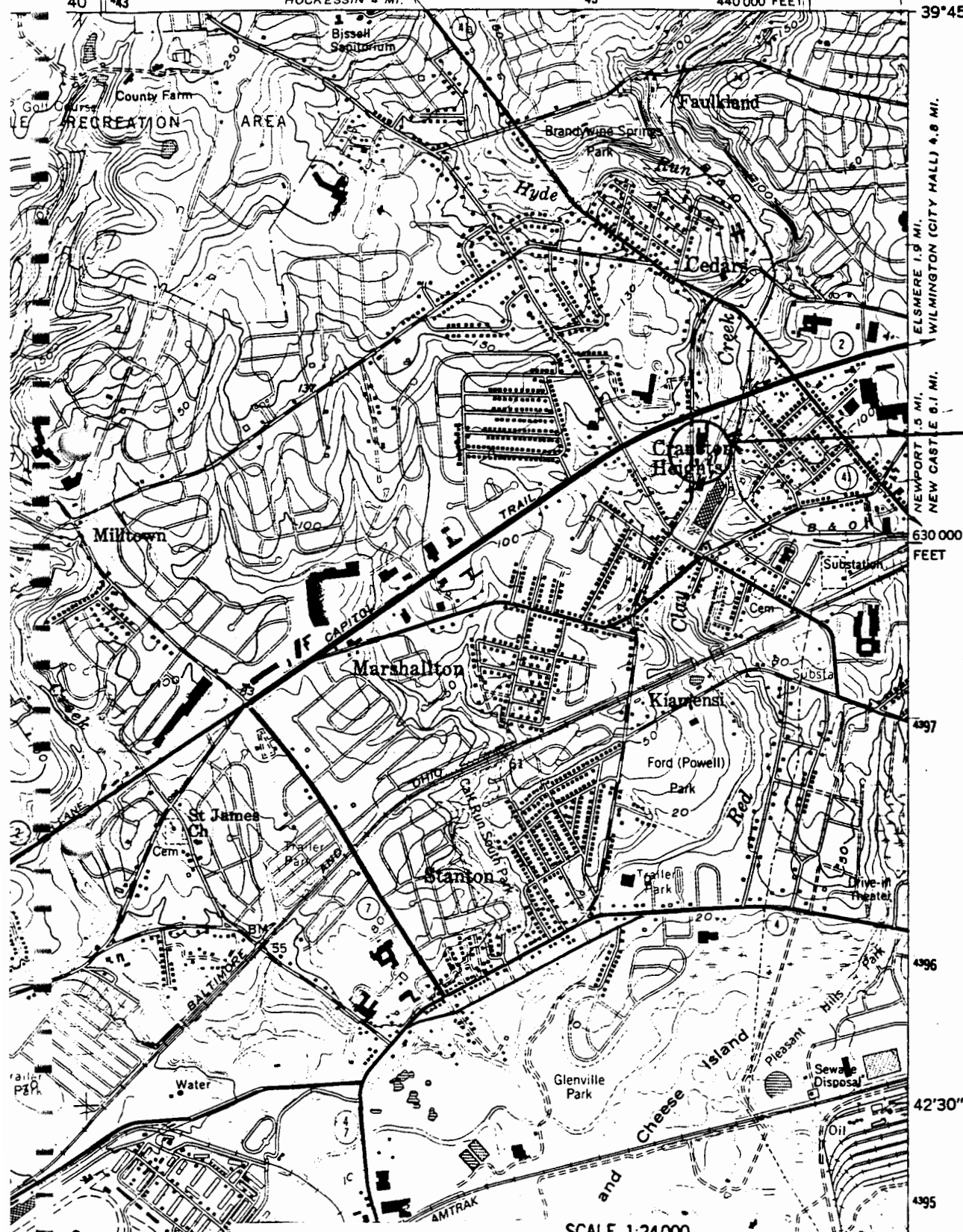
AVONDALE, PA. 8 MI.  
HOCKESSIN 4 MI.

445

440 000 FEET

75°37'30"

39°45'



AMETEK, INC.

ELSMERE 1.9 MI.  
WILMINGTON (CITY HALL) 4.8 MI.

NEWPORT 1.5 MI.  
NEW CASTLE 6.1 MI.

630 000  
FEET

4397

4396

42°30"

4395

SCALE 1:24000

1 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 5 0 1 KILOMETER



## VI. References

### References

1. The Availability of Groundwater in New Castle County, Delaware
2. Soil Survey, New Castle, Delaware 1970
3. "Public Water Systems in Delaware." Delaware Department of Natural Resources and Environmental Control. Water Supply Branch
4. Delaware's Outstanding Natural Areas and Their Preservation  
Lorraine Fleming, 1978.
5. U.S.G.S. Topological Map Newark East Quadangle. Delaware - New Castle Co. 7.5 minute series
6. 1980 U.S. Census
7. United States Geological Survey. Water-Table, Surface-Drainage, and Engineering Soils Map of the Newark Area, Delaware. Boggess, Durwald H. and John K. Adams 1963

DPD/ksd  
DPD7045

VII. Appendix

D R A F T

Sent down April 29,  
1977  
ORIGINAL  
(201)

Mr. H. Dudley Barton  
General Manager  
Haveg Industries, Incorporated  
900 Greenbank Road  
Wilmington, Delaware 19808

Reference: 4/26/76 letter from Robert R. French to John M. Ward

Gentlemen:

The results of an inspection on April 20, 1977, of your facilities located in Marshallton, Delaware indicates that except for the asbestos rotary dryer, equipment operating at the time of the inspection was in compliance with the Delaware Regulations Governing the Control of Air Pollution. The stack serving the asbestos rotary dryer had visible emissions of what must have been asbestos. Regulation XXI, Section 10.4 (8) of the Regulations does not allow visible emissions of asbestos unless certain baghouse specifications are met as per Sections 10.7 and 10.14. A copy of Regulation XXI is enclosed.

These emissions were also visible during an April 12, 1976 inspection (see referenced letter). Please inform us of the measures you plan to take to eliminate the visible emissions and your schedule for completing these measures. If you have any questions concerning this matter, please feel free to contact me at: 678-4791 (Dover).

Sincerely yours,

Robert R. French

74/113-C

M E M O R A N D U M

TO: R. R. French

DATE: September 6, 1973

THROUGH: J. L. Hopkins

FROM: A. H. Simpson

SUBJECT: Haveg Industries, Inc. - Asbestos Control Baghouses  
APC 74/113-116-C

Conclusions:

All four applications meet EPA's baghouse design requirements for asbestos control listed in Federal Register, Vol. 38, No. 66, Section 61.23. Asbestos control systems meeting these design requirements will comply with Federal ambient air quality standards and create no visible emissions. My evaluation was based on the applications meeting these Federal design requirements because the Department of Natural Resources and Environmental Control has requested delegation of authority to implement and enforce the National Emission Standards for Hazardous Air Pollutants.<sup>1</sup> These design requirements are part of these Standards.

Calculations:

APC 74/113-C applies for the installation of three Hoffman Model 751 dust collectors. These dust collectors will clean hood exhausts from machining and sanding operations. These machining and sanding operations involve the finishing of asbestos reinforced materials. Table I below shows that this proposed dust collector meets all EPA's baghouse design requirements for asbestos control except for the maximum pressure drop across the bags. However, according to Francis Alpheizer of EPA Region III, EPA will approve this system because it is equivalent in asbestos control to systems meeting their requirements.

Table I

APC 74/113-C

	<u>Design Specification</u>	<u>EPA Design Requirements</u>
Pressure Drop	5 inch maximum	4 inch maximum
Airflow Permeability	3 ft/min	35 ft/min. maximum
Felted Fabric Weight	18 oz/square yard	14 oz/square yard minimum



ORIGINAL  
(Red)

APC 74/115-C is for the installation of a Wheelbrator Baghouse modified No. 4 Model 126-D. This baghouse will clean the hood exhausts from the briquet forming area. This area involves the shaping of asbestos reinforced materials. Table II below shows that this proposed baghouse meets all EPA's baghouse design requirements for asbestos control. (The felted fabric weight was not included on the application to the Department of Natural Resources and Environmental Control but according to Francis Alpheizer, an advertising brochure on this particular baghouse indicates it meets the 14 oz/square yard minimum.)

Table II

APC 74/115-C

	<u>Design Specifications</u>	<u>EPA Design Requirements</u>
Pressure Drop	3 inch maximum	4 inch maximum
Air Flow Permeability	20 ft/min.	35 ft/min. maximum

APC 74/114-C is for the installation of a baghouse with design specifications calculated by John Mansville Sales Corporation, Environmental Engineering Department. A vendor has not been chosen, but the design specifications listed in the application meet all EPA's baghouse design requirements for asbestos control. This is shown in Table III below. The baghouse will clean the exhausts from the press area where asbestos reinforced materials are processed.

Table III

APC 74/114-C

	<u>Design Specification</u>	<u>EPA Design Requirements</u>
Pressure Drop	3 inch maximum	4 inch maximum
Air Flow Permeability	25 ft/min	35 ft/min maximum
Felted Fabric Weight	N. A. (spun cotton)	

APC 74/116-C is for the installation of a baghouse with design specifications calculated by John Mansville Sales Corporation, Environmental Engineering Department. A vendor has not been chosen, but the design specifications listed in the application meet all EPA's baghouse design requirements for asbestos control. This is shown in Table IV below. The baghouse will clean the exhausts from the Fiber treatment area where asbestos is mixed with resins to form Havg.

ORIGINAL  
(100)

Table IV

APC 74/116-C

	<u>Design Specification</u>	<u>EPA Design Requirements</u>
Pressure Drop	3 inch maximum	4 inch maximum
Air Flow Permeability	25 ft/min.	35 ft/min maximum
Felted Fabric Weight	N. A. (spun cotton)	

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<sup>1</sup> Governor Sherman W. Tribbitt's August letter to Daniel J. Snyder, Regional Administrator EPA Region III.

AHS/dsk

cc: Hugh J. Menghi  
Haveg Industries, Inc. APC 73/113-116-C Files

(204)

M E M O R A N D U M

TO: R. R. French

DATE: July 23, 1974

THRU: J. L. Hopkins

FROM: A. H. Simpson

SUBJECT: Operating Certificate Inspection - APC 74/113-C, APC 75/30-0

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On July 17, 1974, I was accompanied by Haveg representative Frank Smiley on an operating certificate inspection of a high velocity dust collection system for control of fugitive asbestos and fiberglass dust. Such dust emanates in Haveg's machining and sanding departments. EPA representative Francis Alpheizer also carried out an inspection of the equipment at this time. Construction of this collection equipment was initiated by Haveg's old exhaust system not being able to meet EPA's baghouse design requirements for asbestos control.<sup>1</sup>

The new dust collection system captures asbestos and fiberglass dust from up to 25 separate sources within the machining and sanding areas. Dust is captured by means of high velocity pick-up hoses located only inches away from dust sources. Each of these pick-ups exhausts through one of three parallel Hoffman model 751 baghouses which are located outdoors.

During my inspection, the dust collection system was utilized at a typical number of operating sources. The 3500 ft/min. minimum indraft velocities were doing a good job of capturing fugitive dust. No visible emissions could be detected, even when standing right next to either baghouse stack outlet. Baghouse hopper dumping is continual and no emissions could be detected as a result of this operation.

<sup>1</sup> Federal Register, Vol. 38, No. 66, Section 61.23

AHS/jcw

cc: H. J. Menghi

**HAVEG INDUSTRIES, INC.** / *Subsidiary of Hercules Incorporated*

900 Greenbank Road, Wilmington, Delaware 19808

REGISTERED MAIL  
RETURN RECEIPT REQUESTED

August 13, 1974

United States Environmental Protection Agency  
Region III  
6th & Walnut Streets  
Philadelphia, Pennsylvania 19106

Attention: Mr. Stephen R. Wassersug, Director  
Enforcement Division

Gentlemen:

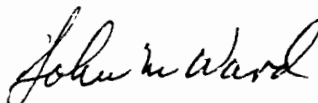
Reference: Waiver of Compliance #DEL-004-A-005

We have completed the installation of our replacement dust collector for our Machine Shop and Descaling Operations and have had Mr. Charles Alpizer of EPA, Region III and Mr. Alan Simpson of the State of Delaware Division of Environmental Control visit the plant to inspect its operation.

We have shut down our Machine Shop Dust System, but have not yet been able to shut down our Descaling Dust Collectors because of the failure of our supplier to deliver all the necessary hoods and hose for our descaling operation. The old dust houses are operating at a reduced level, however, and we are requesting permission to continue to operate these systems until we have received our hoods and hoses. The vendor hopes to deliver these in August. We therefore request an extension of our Waiver of Compliance #DEL-004-A-005 until September 30, 1974.

Very truly yours,

HAVEG INDUSTRIES, INC.

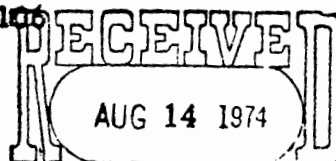


John M. Ward  
General Manager

JMW/gf

cc: Mr. Daniel J. Snyder III  
Regional Administrator  
U.S. EPA - Region III  
6th & Walnut Streets  
Philadelphia, Pennsylvania 19106

Mr. A. Simpson  
Div. of Environmental Control  
14 Ashley Place  
Wilmington, Delaware 19804



STATE OF DELAWARE  
AIR POLLUTION CONTROL DIVISION  
WILMINGTON OFFICE

900 Greenbank Road, Wilmington, Delaware 19808

ORIGINAL  
(Red)

August 22, 1974

United States Environmental Protection Agency  
Region III  
6th & Walnut Streets  
Philadelphia, Pennsylvania 19106

Attention: Mr. Stephen R. Wassersug, Director  
Enforcement Division

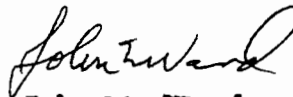
Gentlemen:

Reference: Waiver of Compliance #DEL-004-A-005

In my letter of August 13, 1974, I requested an extension of our waiver of compliance until September 30, 1974. Since that date, we received additional material from our vendor and have been able to completely shut down all the scrubbers which we were operating under the referenced waiver of compliance. We therefore withdraw our request for an extension, and are notifying you that the installation is complete and we are in full compliance with EPA and State regulations.

Very truly yours,

HAVEG INDUSTRIES, INC.



John M. Ward  
General Manager

JMW/gf

cc: Mr. Alan Simpson  
Div. of Environmental Control  
14 Ashley Place  
Wilmington, Delaware 19804

Mr. Daniel J. Snyder III  
Regional Administrator  
U.S. EPA - Region III  
6th & Walnut Streets  
Philadelphia, Pennsylvania 19106

1. Name of Firm or Establishment <b>Haveg Industries, Inc.</b>		Date of Application		Division No. <b>74/113-C</b>	
Mailing Address (Street or P. O. Box) <b>900 Greenbank Road</b>		City <b>Wilmington</b>	County <b>New Castle</b>	Zip Code <b>19808</b>	Source Location No.
2. Name of Owner <b>Hercules Incorporated</b>		City		State	Zip Code
Mailing Address (Street or P. O. Box) <b>910 Market Street</b>		City <b>Wilmington</b>	State <b>Delaware</b>	Zip Code <b>19899</b>	Examined By
3. Name of Person Signing This Application <b>John M. Ward</b>		Title <b>Vice President</b>		Phone <b>656-9881</b>	Date
4. Major Activity at This Location <input checked="" type="checkbox"/> Manufacturing <input type="checkbox"/> Commercial <input type="checkbox"/> Governmental <input type="checkbox"/> Institutional <input type="checkbox"/> Power Generation		Describe Major Activity <b>Manufacture of Plastic Products</b>		SIC Code <b>282</b>	
5. Equipment to Be Registered <input checked="" type="checkbox"/> New <input type="checkbox"/> Replacement <input type="checkbox"/> Modification (See Page 3) <input type="checkbox"/> Existing		Type (Kiln, Rotary Drier, Electric Arc Furnace, Etc.) <b>High Velocity Dust Collection System for Machining and Sanding Departments</b>		Peak Period <b>N/A</b>	
6. Operating Schedule <b>8 Hrs./Day</b> <b>5 Days/Wk</b> <b>52 Wks/Yr.</b>		7. Raw Materials Used Type <b>Asbestos Reinforced Phenolic or Furan Resin (Haveg)</b>		Est. 500 Lbs./Hr. Rate <b>1/4/74</b>	
Type <b>Glass Reinforced Epoxy (Haveg)</b>		Est. 10 Lbs./Hr. Rate <b>1/4/74</b>			
8. Product Produced Type <b>Haveg Pipe, Fittings, Tanks, and Towers</b>		Est. 450 Lbs./Hr. Rate <b>1/4/74</b>			
Type <b>Fiberglass Reinforced Haveg</b>		Est. 9 Lbs./Hr. Rate <b>1/4/74</b>			
9. Gas Flow Rate <b>N/A</b> Inlet _____ ACFM @ _____ °F Outlet _____ ACFM @ _____ °F					
10. Is Direct Heat Transfer Used <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Type Fuel <b>N/A</b>	% Sulfur <b>N/A</b>	% Ash <b>N/A</b>	Quantity/Year <b>N/A</b>
11. Stack Height Est. 10 Ft. Above Grade		Inside Diameter of Outlet <b>Two Outlets at 12 In</b>	Exit Gas Temp. <b>170 °F.</b>	Material of Construction <b>Steel</b>	

ORIGINAL  
(Red)

Exit Gas Flow Rate <b>&lt; 10,000</b> ACFM	Exit Gas Velocity <b>100</b> Ft./Sec.	Sampling Ports <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Number	Location
Height of Nearest Obstruction <b>Approx. 30</b> Ft.		Distance to Nearest Obstruction <b>Approx. 40</b> Ft.		
12 Flue Gas Cleaning Equipment <b>N/A</b> <input type="checkbox"/> Yes <input type="checkbox"/> No		Expected Date of Completion of Installation or Modification <b>March, 1974</b>		
13 Gas Cleaning Equipment				
Manufacturer <b>Three (3) Hoffman Model 751 Dust Collectors</b>				
Type (Venturi Scrubber, Baghouse, Elec. Precip, Etc.) <b>Three (3) Baghouses - each with 1,108 Sq. Ft. Polypropylene Filter Media, 18 Oz. Double High Gloss Felt</b>				Model or Cat. No. <b>Model 751</b>
Describe Control Device (Example: Scrubber, Scrubbing Liquid, Liquid Rate (GPM), Recirculated, Method of Liquid Dispersion, Etc.)  <b>Three (3) Bag Filters - Atmospheric Discharge through Silencer</b>				
Pressure Drop <b>5" H<sub>2</sub>O Maximum</b>	Capacity <b>&lt; 10,000</b> CFM	Gas Temperature Inlet <b>72</b> °F. Outlet <b>172</b> °F.		
Efficiency	Give Basis of Efficiency Determination			
Inlet Contaminant Concentration  Lbs./Std. Cu. Ft.		Outlet Contaminant Concentration <b>No Visible Emission</b> Lbs./Std. Cu. Ft.		
Inlet Emission Rate  Lbs./Hr.		Outlet Emission Rate  Lbs./Hr.		
Installation Cost of Device <b>\$150,000</b>		Operating Cost of Device <b>Est. \$5,400/Yr.</b>		
14 Emissions *				
Type Sulfur Dioxide, Hydrogen Sulfide, Etc.	Actual Emissions (With Existing Controls)		Potential Emissions (Without Controls)	
_____	_____ lbs./Hr.		_____ lbs./Hr.	
_____	_____ lbs./Hr.		_____ lbs./Hr.	
_____	_____ lbs./Hr.		_____ lbs./Hr.	
* All Values Should Represent Maximum Production Capacity				

*John H. Ward*  
Signature of Owner or Authorized Agent

ORIGINAL  
(Red)

John C. Bryson

July 25, 1973

Mr. John M. Wards, Vice President  
Haveg Industries, Inc.  
900 Greenbank Road  
Wilmington, Delaware 19808

Dear Mr. Ward:

It has been recently ascertained that Haveg Process, Inc. intends to install (a) a new machining and sanding exhaust system; (b) hoods over resin-asbestos mixing system and (c) hoods over an asbestos digester.

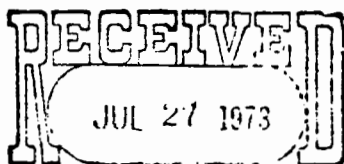
It would seem that each of these new installations will have an emissions to the atmosphere and in accordance with the State of Delaware Regulations Governing the Control of Air Pollution, a construction permit must be obtained from this agency prior to installation.

Three sets of application forms are enclosed. Please complete in duplicate for each installation and submit to this office. If you should have any question, contact Alan Simpson, telephone 658-6348 or this office.

Sincerely yours,

Robert R. French, Manager  
Air Resources Section  
Division of Environmental Control

HJM:ra  
Enclosures



STATE OF DELAWARE  
AIR POLLUTION CONTROL DIVISION  
WILMINGTON OFFICE





ORIGINAL  
(Red)

STATE OF DELAWARE  
DEPARTMENT OF NATURAL RESOURCES  
& ENVIRONMENTAL CONTROL  
DIVISION OF AIR & WASTE MANAGEMENT  
89 KINGS HIGHWAY  
P.O. BOX 1401  
DOVER, DELAWARE 19903

WASTE MANAGEMENT  
SECTION

TELEPHONE: (302) 736 - 4781

MEMORANDUM

TO: Ametek Inspection File  
FROM: Ellen D. Malenfant *EDM*  
SUBJECT: C/M Inspection DED 061805487  
DATE: July 9, 1986

On June 9, 1986 Greg DeCowsky and I conducted a RCRA inspection of this interim status storage facility. Company representative during the inspection was Robert Becker.

At this time, Ametek is generating the following waste streams in their manufacturing processes, which are associated with making Haveg plastic pipe and joint fittings:

1. Caustic sludge (D002) - (2 to 3 drums per year) used to clean their phenolic and furan resin mixing kettles. The sludge is settled out and the caustic is reused for neutralization in waste water treatment. Discussion: At the time of this inspection only the sludge was considered hazardous waste, the caustic sludge mixture is considered reuseable since the caustic is used for neutralization. Mr. Becker did not know if the redefinition of solid waste in the November 1985 amendments to the Delaware Regulations Governing Hazardous Waste would affect the management of this material as hazardous waste. Using the recycling checklist, per §261.2(e)(1)(ii) the caustic sludge is not a solid waste since it is used as an effective substitute for a commercial product. Therefore, only the sludge would be hazardous waste.
2. Isopropyl alcohol (D001) - (1 to 3 drums per year) This material is used for cleaning batch mixers in "Haveg" manufacture.

M E M O R A N D U M

TO: R. R. French

DATE: February 1, 1977

FROM: A. H. Simpson

SUBJECT: January 24, 1977 Asbestos Release & Baghouse Failure at Haveg Industries

Reference: January 24, 1977 Field Report by Dennis Wallace

---

At 11:30 a.m., Haveg representative Bob Good called the Wilmington Air Resources Office to report a baghouse failure. Operators started the machine shop ventilation system (APC 75/30-0) at 6:00 a.m. It was shutdown at 6:45 a.m. when it was discovered that one of the three Hoffman baghouses and one of the two exhaust blowers on the system had burned up. The cause of the incident is unknown.

Emissions may or may not have been released from the collapsing of the baghouse. APC 75/30-0 requires that no visible emissions leave the baghouses.

AHS/job

cc: W. Lawrence

ORIGINAL  
(Red)

C/M Inspection DED 061805487  
July 9, 1986  
Page 2

3. Furryl alcohol (D001) (1-3 drums per year)  
This material is used for cleaning batch mixers in "Haveg" manufacture.
4. Acetone finishing solution - They are phasing out this product, this waste is generated only as an off-spec. product.
5. MEK (F005) (1-2 drums per year) This material is used for cleaning equipment and tools from their filament winding process. Phenolic and furan resins are also used in the process.
6. Methylene Chloride (1-2 drums per year) This is a stripper used for cleaning equipment used in mixing epoxy resins.
7. Lab wastes from the company's QC and R&D laboratory. (1 drum per year)
8. Phenol contaminated debris generated from cleaning the phenol tank dike. (8-12 drums per year). This waste stream should be eliminated or greatly reduced since a leaking pump has recently been replaced.
9. Tool cleaner used in maintenance department - This D001 waste is recycled through Safety Kleen. Mr. Becker had not included this material in his hazardous waste inventory. We informed him that this is also a regulated hazardous waste.

No violations nor problems were encountered during the inspection of this hazardous waste storage facility. However, the facility wants to move its storage area within the next two months because the space is needed for a new manufacturing process production area. The company is currently investigating the possibility of withdrawing its Part B application and becoming a less than 90 day storage/generator facility. Based on generated quantities stated, this facility may fall within the SQG category, in which case they would be able to store for less than 180 days without a permit.

If they decide to move the storage area and continue to be a storage facility a permit may need to be issued before they could store in the new storage area since this would be a new unit.

Mr. Becker said he would inform the Department within the month of his facility's plans.

EM:cm  
cc: Alan H. Simpson  
Gregory DeCowsky

MEMORANDUM

ORIGINAL  
(Red)

TO: Ametek Inspection File Date: March 15, 1985

THRU: Alan H. Simpson

FROM: Linda J. Shanley *W 3/5*

SUBJECT: March 7, 1985 RCRA Inspection

INSPECTORS: Alan H. Simpson, Environmental Engineer, DNREC  
George J. Bender, Environmental Scientist, DNREC  
Matthew P. Brill, Environmental Scientist, DNREC  
Linda J. Shanley, Resource Control Specialist, DNREC

FACILITY

REPRESENTATIVE: Robert Becker, Environmental Coordinator  
EPA ID # DED 06 180 5487

---

On March 7, 1985 an inspection was conducted of the Ametek Haveg Facility. The purpose of this inspection was to familiarize the DNREC inspectors with the facility as well as to conduct a RCRA compliance inspection.

The Ametek Haveg facility is located on Greenbank Road approximately 1/4 mile south of Route #2 (Kirkwood Highway) near Prices Corner.

The facility has four major processes which generate hazardous waste.

1. Haveg process manufactures chemical process equipment (tanks, ducts, pipe, etc.) from the "Haveg" material. The Haveg material consists of a phenolic resin (phenol and acid) or a furan (formaldehyde) resin and pharmaceutical grade talc.

The following hazardous wastes are generated from the Haveg process:

Isopropyl alcohol - cleaning Haveg equipment  
Furfuryl alcohol - cleaning Haveg equipment  
Acetone, butyl alcohol, and benzyl sulfonic acid - finishing solution used to smooth surfaces on finished tanks.

2. Resin manufacture - making of phenolic and furan resins which are used at the facility.

The following hazardous wastes are generated from this process:

Kettle wash sludge - a caustic sludge generated from cleaning the containers (kettles) that the resins are mixed in. A solution of caustic and water is used in this cleaning. The sludge is drummed and treated as a corrosive hazardous waste (D002). The liquid from this process is used in the Siltemp process to neutralize the waste acid for discharge to the Wilmington sewer system.

(Red)

MEMO: Ametek Inspection File - March 7, 1985 RCRA Inspection  
March 12, 1985  
Page Two

3. Siltemp process manufactures a glass cloth which is bleached with acid. It is used as a thermal cloth or insulation material. Waste hydrochloric acid is generated from the digestion process which is then neutralized by limestone and caustic liquid from the cleaning of the kettles in the resin manufacture. This process meets the definition of elementary neutralization and not treatment as defined. The treated water flows into the sewer system.
4. Chemtite process manufactures pipe, parts and fittings. It consists of fiberglass impregnated with resin which is wound and then cured.

The following hazardous wastes are generated from the lab and from cleaning around phenol (raw material) tanks.

The lab generates F003- non-halogenated solvents consisting of acetone, toluene, mineral spirits, ethyl alcohol, phenolic and furan resins.

The diked concrete area around the two phenol tanks is periodically cleaned. Some small amounts of spilled phenol, leaves and other debris are collected, drummed and treated as U188 hazardous waste.

A tour was taken of the entire facility to see how the wastes are generated. Also the four transfer areas where drums are temporarily held until filled were inspected.

Each of these transfer areas consisted of one drum on a square tray with a 3" side to contain small spills. Each drum had a funnel with a lid which was closed except for the methylene chloride drum (Haveg area) in which the funnel had been removed and the "bung" was open.

The lab area drum was located outside but in a metal cabinet. It was a new drum and was not being filled so it was closed.

It was noted on the inspection that the areas around the methylene chloride drum and the lab drum have generally poor housekeeping practices. There was evidence of spills and splashes around the drums which were not cleaned up.

The RCRA container storage area has a capacity of 125 drums. On the day of our inspection there were 22 hazardous waste drums and 30-40 non-hazardous waste drums in storage. The drums are stored on pallets on 2 tiered shelves. The hazardous waste drums were all in good condition and stored and labelled properly.

ORIGINAL  
(Red)

Ametek Inspection File - March 7, 1985 RCRA Inspection  
March 12, 1985  
Page Three

The safety equipment is also stored in this room. Absorbent material, chemical splash suits, respirators, and fire control equipment was observed.

The storage area is kept locked except when in use. There are appropriate signs and warnings posted and the entire area has a sprinkler system.

There were no deficiencies noted in the storage area.

Recommendations:

A letter of warning should be issued to the company for the absence of a lid on the methylene chloride drum in the Haveg area. It should also be mentioned that housekeeping practices are very poor in the areas around the methylene chloride drum and the lab area drum.

AHS:LJS:klr

cc: Alan H. Simpson  
George J. Bender  
Matthew P. Brill



## POTENTIAL HAZARDOUS WASTE SITE IDENTIFICATION

REGION

SITE NUMBER

**NOTE:** The initial identification of a potential site or incident should not be interpreted as a finding of illegal activity or confirmation that an actual health or environmental threat exists. All identified sites will be assessed under the EPA's Hazardous Waste Site Enforcement and Response System to determine if a hazardous waste problem actually exists.

## A. SITE NAME

Ametek, Inc.

## B. STREET (or other identifier)

900 Greenbank Road

## C. CITY

Wilmington, Delaware

## D. STATE

DE

## E. ZIP CODE

19808

## F. COUNTY NAME

## G. OWNER/OPERATOR (if known)

## 1. NAME

Naveg Industries, Inc.

## 2. TELEPHONE NUMBER

(302) 656-9881

## H. TYPE OF OWNERSHIP (if known)

☐ 1. FEDERAL ☐ 2. STATE ☐ 3. COUNTY ☐ 4. MUNICIPAL ☒ 5. PRIVATE ☐ 6. UNKNOWN

## I. SITE DESCRIPTION

Manufacturing facility previously involved with the use of asbestos reinforced phenolic or furan resin, located adjacent to the Red Clay Creek.

## J. HOW IDENTIFIED (i.e., citizen's complaint, OSHA citation, etc.)

Through Tisdell-Haveg Preliminary Assessment- DE DNREC

## K. DATE IDENTIFIED (mo., day, &amp; yr.)

Nov 1985

## L. SUMMARY OF POTENTIAL OR KNOWN PROBLEM

Potential asbestos problem in the soil and the adjacent surface water of the Red Clay Creek.

## M. PREPARER INFORMATION

## 1. NAME

Deborah P. Dewsbury

## 2. TELEPHONE NUMBER

(302) 323-4560

## 3. DATE (mo., day, &amp; yr.)

2-18-88

ORIGINAL  
(Red)

**APPENDIX B**



DEPARTMENT OF NATURAL RESOURCES  
AND ENVIRONMENTAL CONTROL

## AIR POLLUTION CONTROL

Reference # 1

APPROVED  
(Signature)

## APPLICATION FOR REGISTRATION OF PROCESS EQUIPMENT

(Complete in Duplicate - Include Drawings of All Equipment)

1 Name of Firm or Establishment <b>Haveg Industries, Inc.</b>				Date of Application		Division No. Registration No. <b>74/113-G</b>	
Mailing Address (Street or P. O. Box) <b>900 Greenbank Road</b>		City <b>Wilmington</b>	County <b>New Castle</b>	Zip Code <b>19808</b>		Source Location No.	
2 Name of Owner <b>Hercules Incorporated</b>						ULM Grid Coordinates	
Mailing Address (Street or P. O. Box) <b>910 Market Street</b>		City <b>Wilmington</b>	State <b>Delaware</b>	Zip Code <b>19899</b>		Examined By	
3 Name of Person Signing This Application <b>John M. Ward</b>				Title <b>Vice President</b> <b>Haveg Industries, Inc.</b>	Phone <b>656-9881</b>	Date	
4 Major Activity at This Location <input checked="" type="checkbox"/> Manufacturing <input type="checkbox"/> Commercial <input type="checkbox"/> Apartment <input type="checkbox"/> Governmental <input type="checkbox"/> Institutional <input type="checkbox"/> Power Generation							
No. of Employees at This Location <b>246</b>		Describe Major Activity <b>Manufacture of Plastic Products</b>				SIC Code <b>282</b>	
5 Equipment to Be Registered <input checked="" type="checkbox"/> New <input type="checkbox"/> Replacement <input type="checkbox"/> Modification (See Page 3) <input type="checkbox"/> Existing							
Type (Kiln, Rotary Drier, Electric Arc Furnace, Etc.) <b>High Velocity Dust Collection System for Machining and Sanding Departments</b>							
6 Operating Schedule <b>8 Hrs./Day    5 Days/Wk    52 Wks./Yr.</b>						Peak Period <b>N/A</b>	
7 Raw Materials Used Type <b>Asbestos Reinforced Phenolic or Furan Resin (Haveg)</b>						Est. 500 Lbs./Hr. Rate <b>74/113</b>	
Type <b>Glass Reinforced Epoxy (Haveg)</b>						Est. 10 Lbs./Hr. Rate <b>74/113</b>	
8 Product Produced Type <b>Haveg Pipe, Fittings, Tanks, and Towers</b>						Est. 450 Lbs./Hr. Rate <b>74/113</b>	
Type <b>Fiberglass Reinforced Haveg</b>						Est. 9 Lbs./Hr. Rate <b>74/113</b>	
9 Gas Flow Rate <b>N/A</b> Inlet _____ ACFM @ _____ °F Outlet _____ ACFM @ _____ °F							
10 Is Direct Heat Transfer Used <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Type Fuel <b>N/A</b>		% Sulfur <b>N/A</b>	% Ash <b>N/A</b>	Quantity/Year <b>N/A</b>	
11 Stack Height Est. 10 Ft. Above Grade		Inside Diameter at Outlet Two Outlets at 12 In		Exit Gas Temp. 170 °F		Material of Construction Steel	

Exit Gas Flow Rate <b>&lt; 10,000</b> ACFM	Exit Gas Velocity <b>100</b> Ft./Sec.	Sampling Ports <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Number	Location
Height of Nearest Obstruction <b>Approx. 30</b> Ft.		Distance to Nearest Obstruction <b>Approx. 40</b> Ft.		
12 Flue Gas Cleaning Equipment <b>N/A</b> <input type="checkbox"/> Yes <input type="checkbox"/> No		Expected Date of Completion of Installation or Modification <b>March, 1974</b>		
13 Gas Cleaning Equipment				
Manufacturer <b>Three (3) Hoffman Model 751 Dust Collectors</b>				
Type (Venturi Scrubber, Baghouse, Elec. Precip, Etc.) <b>Three (3) Baghouses - each with 1,108 Sq. Ft. Polypropylene Filter Media, 18 Oz. Double High Gloss Felt</b>				Model or Cat. No. <b>Model 751</b>
Describe Control Device (Example: Scrubber; Scrubbing Liquid, Liquid Rate (GPM), Recirculated, Method of Liquid Dispersion, Etc.) <b>Three (3) Bag Filters - Atmospheric Discharge through Silencer</b>				
Pressure Drop <b>5" H<sub>2</sub>O Maximum</b>	Capacity <b>&lt; 10,000</b> CFM	Gas Temperature Inlet <b>72</b> °F. Outlet <b>172</b> °F.		
Efficiency	Give Basis of Efficiency Determination			
Inlet Contaminant Concentration <b>Lbs./Std. Cu. Ft.</b>		Outlet Contaminant Concentration <b>No Visible Emission</b> <b>Lbs./Std. Cu. Ft.</b>		
Inlet Emission Rate <b>Lbs./Hr.</b>		Outlet Emission Rate <b>Lbs./Hr.</b>		
Installation Cost of Device <b>\$150,000</b>		Operating Cost of Device <b>Est. \$5,400/Yr.</b>		
14 Emissions				
Type Sulfur Dioxide, Hydrogen Sulfide, Etc.	Actual Emissions (With Existing Controls)		Potential Emissions (Without Controls)	
_____	_____ lbs./Hr.		_____ lbs./Hr.	
_____	_____ lbs./Hr.		_____ lbs./Hr.	
_____	_____ lbs./Hr.		_____ lbs./Hr.	
* All Values Should Represent Maximum Production Capacity				

*John E. Ward*  
Signature of Owner or Authorized Agent

## M E M O R A N D U M

TO: Ametek Inspection File Date: March 15, 1985

THRU: Alan H. Simpson

FROM: Linda J. Shanley *LS* 3/15

SUBJECT: March 7, 1985 RCRA Inspection

INSPECTORS: Alan H. Simpson, Environmental Engineer, DNREC  
George J. Bender, Environmental Scientist, DNREC  
Matthew P. Brill, Environmental Scientist, DNREC  
Linda J. Shanley, Resource Control Specialist, DNREC

FACILITY  
REPRESENTATIVE: Robert Becker, Environmental Coordinator  
EPA ID # DED 06 180 5487

---

On March 7, 1985 an inspection was conducted of the Ametek Haveg Facility. The purpose of this inspection was to familiarize the DNREC inspectors with the facility as well as to conduct a RCRA compliance inspection.

The Ametek Haveg facility is located on Greenbank Road approximately 1/4 mile south of Route #2 (Kirkwood Highway) near Prices Corner.

The facility has four major processes which generate hazardous waste.

1. Haveg process manufactures chemical process equipment (tanks, ducts, pipe, etc.) from the "Haveg" material. The Haveg material consists of a phenolic resin (phenol and acid) or a furan (formaldehyde) resin and pharmaceutical grade talc.

The following hazardous wastes are generated from the Haveg process:

Isopropyl alcohol - cleaning Haveg equipment  
Furfuryl alcohol - cleaning Haveg equipment  
Acetone, butyl alcohol, and benzyl sulfonic acid - finishing solution used to smooth surfaces on finished tanks.

2. Resin manufacture - making of phenolic and furan resins which are used at the facility.

The following hazardous wastes are generated from this process:

Kettle wash sludge - a caustic sludge generated from cleaning the containers (kettles) that the resins are mixed in. A solution of caustic and water is used in this cleaning. The sludge is drummed and treated as a corrosive hazardous waste (D002). The liquid from this process is used in the Siltemp process to neutralize the waste acid for discharge to the Wilmington sewer system.

3. Siltemp process manufactures a glass cloth which is bleached with acid. It is used as a thermal cloth or insulation material. Waste hydrochloric acid is generated from the digestion process which is then neutralized by limestone and caustic liquid from the cleaning of the kettles in the resin manufacture. This process meets the definition of elementary neutralization and not treatment as defined. The treated water flows into the sewer system.
4. Chemtite process manufactures pipe, parts and fittings. It consists of fiberglass impregnated with resin which is wound and then cured.

The following hazardous wastes are generated from the lab and from cleaning around phenol (raw material) tanks.

The lab generates F003- non-halogenated solvents consisting of acetone, toluene, mineral spirits, ethyl alcohol, phenolic and furan resins.

The diked concrete area around the two phenol tanks is periodically cleaned. Some small amounts of spilled phenol, leaves and other debris are collected, drummed and treated as U188 hazardous waste.

A tour was taken of the entire facility to see how the wastes are generated. Also the four transfer areas where drums are temporarily held until filled were inspected.

Each of these transfer areas consisted of one drum on a square tray with a 3" side to contain small spills. Each drum had a funnel with a lid which was closed except for the methylene chloride drum (Haveg area) in which the funnel had been removed and the "bung" was open.

The lab area drum was located outside but in a metal cabinet. It was a new drum and was not being filled so it was closed.

It was noted on the inspection that the areas around the methylene chloride drum and the lab drum have generally poor housekeeping practices. There was evidence of spills and splashes around the drums which were not cleaned up.

The RCRA container storage area has a capacity of 125 drums. On the day of our inspection there were 22 hazardous waste drums and 30-40 non-hazardous waste drums in storage. The drums are stored on pallets on 2 tiered shelves. The hazardous waste drums were all in good condition and stored and labelled properly.

ORIGINAL  
10-11MEMORANDUM

TO: Robert J. Taggart *RJT*  
FROM: J. Kenneth Taft *JKT*  
SUBJECT: AMETEK Biennial Inspection  
DATE: October 1, 1987

---

An EPA required inspection was conducted at AMETEK/Haveg Division, 900 Greenbank Road, Marshalton, on September 29, 1987. The plant has three product groups: (1) Woven Silica Insulation, a replacement for asbestos products, handled in the Siltemp area; (2) Chemtite phenolic talc resin products including piping and storage tanks, the material is better suited than fiberglass material in handling heated acids; and (3) Teflon Heat Exchangers made up of a network of small teflon tubing inserted into a large pipe.

The Plant was judged to be in compliance, although many of the processes were not in operation. There was no evidence of emission build-up at any of the discharge points. Two permits had some process equipment removed and AMETEK had not notified our section. Also two non-permitted degreasers were found. It was felt that these points were not significant and the Company has agreed to correct them.

JKT:sep  
JKT100



STATE OF DELAWARE  
DEPARTMENT OF NATURAL RESOURCES  
& ENVIRONMENTAL CONTROL  
DIVISION OF ENVIRONMENTAL CONTROL  
AIR RESOURCES SECTION  
EDWARD TATNALL BUILDING  
P.O. Box 1401  
DOVER, DELAWARE 19901

TELEPHONE: (302) 736-4791

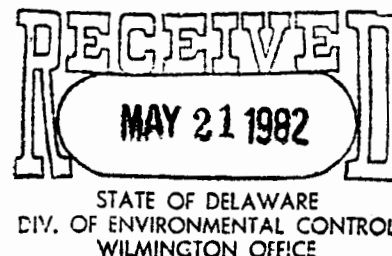
May 20, 1982

Permit: APC - 82/697 - OPERATION  
Ametek, Inc./Haveg Division  
Acid Digesters and HCl Transfer Operation - Wilmington

Ametek, Inc./Haveg Division  
900 Greenbank Road  
Wilmington, DE 19808

Attention: Mr. H. Dudley Barton, General Manager

Gentlemen:



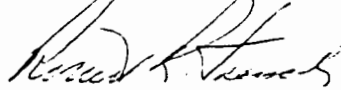
Pursuant to the State of Delaware Regulations Governing the Control of Air Pollution, Regulation No. II, Section 3, approval of the Department of Natural Resources and Environmental Control is hereby granted for the operation of four steam eductors used to transfer hydrochloric acid and two acid digesters controlled by a common scrubbing system at the Ametek facility in Wilmington, Delaware, based on the March 1, 1982 permit renewal request letter. This operating permit is a renewal of permits APC 79/874-0 and APC 79/900-0 which were issued based on the applications submitted on Form No. AR-6, dated September 24, 1973, and signed by John W. Ward.

This Permit is issued subject to the following conditions:

1. Air contaminant emission levels shall not exceed those prescribed by the State of Delaware Regulations Governing the Control of Air Pollution. No hydrochloric acid odors shall be detected beyond Ametek's plant property line in sufficient quantities to cause or create a condition of air pollution.
2. Representatives of the Department of Natural Resources and Environmental Control may, at any reasonable time, inspect this facility.
3. Emergency conditions that require venting of materials to the atmosphere or create a condition of air pollution shall be reported to the Division of Environmental Control immediately.

4. The scrubbing system shall be operational whenever either the HCl transfer operation or the acid digesters are in operation.
5. The Company shall notify the Air Resources Section within 10 days after start-up of this equipment to arrange for a demonstration of satisfactory performance.
6. This Permit expires on February 4, 1984. Application for renewal must be made not earlier than 120 nor later than 90 days prior to expiration.
7. This Permit shall be available on the premises.
8. Failure to comply with the provisions of this Permit shall be grounds for suspension or revocation.

Sincerely yours,



Robert R. French, P.E.  
Manager, Air Resources Section  
Division of Environmental Control  
Telephone: (302) 736-4791

RRF/JWP/rdr



STATE OF DELAWARE  
DEPARTMENT OF NATURAL RESOURCES  
& ENVIRONMENTAL CONTROL  
DIVISION OF ENVIRONMENTAL CONTROL  
AIR RESOURCES SECTION  
EDWARD TATNALL BUILDING  
P.O. BOX 1401  
DOVER, DELAWARE 19901

Reference #6

*Rec'd Wilm*  
*2/5/81*

TELEPHONE (302) 736 4791

February 4, 1981

Permit: APC - 81/301 - OPERATION  
AMETEK, Inc./Haveg Division  
Formaldehyde Storage Tank - Wilmington

AMETEK, Inc./Haveg Division  
900 Greenbank Road  
Wilmington, Delaware 19808

Attention: H. Dudley Barton

Gentlemen:

Pursuant to the State of Delaware Regulations Governing the Control of Air Pollution, Regulation No. II, Section 3, approval of the Department of Natural Resources and Environmental Control is hereby granted for the operation of a 3,000 gallon formaldehyde storage vessel at the AMETEK, Inc./Haveg Division facility at 900 Greenbank Road, Wilmington, Delaware, based on the November 25, 1980, permit renewal request letter. This operating permit is a renewal of APC 78/260-0 which was issued based on the application dated September 24, 1973, and signed by John M. Ward.

This permit is issued subject to the following conditions:

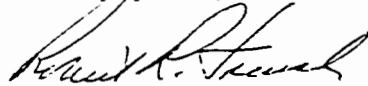
1. Air contaminant emission levels shall not exceed those set forth in the State of Delaware Regulations Governing the Control of Air Pollution.
2. Representatives of the Department of Natural Resources and Environmental Control may, at any reasonable time, inspect this facility.
3. Emergency conditions that require venting of materials to the atmosphere or create a condition of air pollution shall be reported to the Division of Environmental Control immediately.
4. The vessel shall only be filled about once a year.



Permit: APC - 81/301 - 0  
AMETEK, Inc./Haveg Division  
Page Two

5. In the event air standards are established for hydrocarbons this permit may be modified to include compliance requirements and/or a schedule for compliance with such standards.
6. This permit expires on February 4, 1984. Application for renewal must be made not earlier than 120 nor later than 90 days prior to expiration.
7. This permit shall be available on the premises.
8. Failure to comply with the provisions of this permit shall be grounds for suspension or revocation.

Sincerely yours,



Robert R. French, P.E.  
Manager, Air Resources Section  
Division of Environmental Control  
Telephone: (302) 736-4791

RRF:HJM:bh

(Rec'd)

Rec'd Wilm  
2/5/81

736-

February 4, 1981

Permit: APC - 81/268 - OPERATION  
AMETEK, Inc./Haveg Division  
2 Phenol Storage Tanks - Wilmington

AMETEK, Inc./Haveg Division  
900 Greenbank Road  
Wilmington, DE 19808

Attention: H. Dudley Barton

Gentlemen:

Pursuant to the State of Delaware Regulations Governing the Control of Air Pollution, Regulation No. II, Section 3, approval of the Department of Natural Resources and Environmental Control is hereby granted for the operation of two phenol storage tanks at the AMETEK, Inc./Haveg Division facility at 900 Greenbank Road, Wilmington, Delaware based on the October 31, 1980 permit renewal request letter. This operating permit is a renewal of APC 78/140-0 which was issued based on the application dated September 24, 1973 and signed by John M. Ward.

This permit is issued subject to the following conditions:

1. Air contaminant emission levels shall not exceed those set forth in the State of Delaware Regulations Governing the Control of Air Pollution.
2. Representatives of the Department of Natural Resources and Environmental Control may, at any reasonable time, inspect this facility.
3. Emergency conditions that require venting of materials to the atmosphere or create a condition of air pollution shall be reported to the Division of Environmental Control immediately.
4. In the event air standards are established for hydrocarbons this permit may be modified to include compliance requirements and/or a schedule for compliance with such standards.

Permit: APC - 81/268 - 0  
AMETEK, Inc./Haveg Division  
Page Two

5. This permit expires on February 4, 1984. Application for renewal must be made not earlier than 120 nor later than 90 days prior to expiration.

6. This permit shall be available on the premises.

7. Failure to comply with the provisions of this permit shall be grounds for suspension or revocation.

Sincerely yours,

Robert R. French, P.E.  
Manager, Air Resources Section  
Division of Environmental Control  
Telephone: (302) 736-4791

RRF:HJM:bh

Changes noted: None

Compliance Status: In compliance

Comments & Recommendations: None

Processes inspected: One Chemical Storage Facility

Equipment: Two storage tanks available Permit-A/C

Emission Point: Tank Breathing Valve

Tests: Visual

Test Date: No test performed

Operating Rate: Normal

Changes noted: Minor equipment in good working order

Compliance Status: In compliance

Comments & Recommendations: None

Ametek Inspection File - March 7, 1985 RCRA Inspection  
March 12, 1985  
Page Three

100-100000-100000  
(Re-1)

The safety equipment is also stored in this room. Absorbent material, chemical splash suits, respirators, and fire control equipment was observed.

The storage area is kept locked except when in use. There are appropriate signs and warnings posted and the entire area has a sprinkler system.

There were no deficiencies noted in the storage area.

Recommendations:

A letter of warning should be issued to the company for the absence of a lid on the methylene chloride drum in the Haveg area. It should also be mentioned that housekeeping practices are very poor in the areas around the methylene chloride drum and the lab area drum.

AHS:LJS:klr

cc: Alan H. Simpson  
George J. Bender  
Matthew P. Brill

# AMETEK

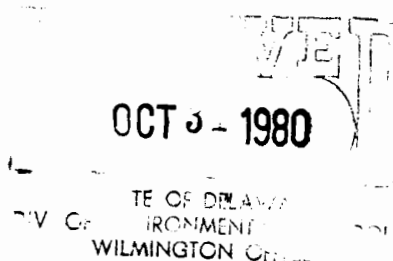
HAVEG DIVISION • 900 GREENBANK ROAD, WILMINGTON, DE 19808

TELEPHONE: (302) 995-3800- 3710

Reference #8  
ORIGINAL  
(Red)

October 30, 1980

Mr. Robert R. French  
Manager, Air Resources Section  
Division of Environmental Control  
Post Office Box 1401  
Dover, Delaware 19901



Dear Mr. French:

This letter will confirm my recent conversation with Mr. David Burke of your section.

The Marshallton Plant of Haveg Industries, Inc., was purchased by AMETEK, Inc. on October 8, 1980, and is now known as AMETEK, Inc./Haveg Division.

The Marshallton Plant is the holder of the air permits shown on the attached list as Haveg Industries, Inc. These permits should be transferred to AMETEK, Inc./Haveg Division, effective October 8, 1980; however, we would like to make the following changes, which reflect the elimination of the use of asbestos at the Marshallton Operation and the elimination of one permit for equipment which is no longer being used.

#1. APC-80/985 - Asbestos Rotary Dryer

This equipment is no longer in operation, and will not be used under the permit conditions. The permit is no longer required and should be cancelled. The baghouse may later be used in another process, which may require our applying for a new permit under new operating conditions in the future.

#2. APC-78/261 - Chemtite Press Area Baghouse

The title of this permit should be changed to "Press Area Baghouse", since the product now being produced is not "Chemtite", and contains no asbestos. We also feel that permit condition #1, stating "no visible emissions", should be changed to a lesser requirement to reflect the elimination of asbestos from this system.

(more)

#3. APC-80/1186 - Machine Shop Asbestos Ventilation

The title of this permit should be changed to "Machine Shop Ventilation" since asbestos has been eliminated from this operation. We also feel that permit condition #1, "no visible emission", should be changed to a lesser requirement to reflect the elimination of asbestos from this system.

#4. APC-79/874 - Asbestos Digesters

The title of this permit should be changed to "Acid Digesters" to reflect the elimination of asbestos from this system. We also feel that condition #5, "there shall be no visible asbestos emissions", should be changed to reflect the elimination of asbestos from this system, and the body of the first paragraph be changed to eliminate the word "asbestos".

#5. APC-79/899 - Asbestos Filter Beds

The title of this permit should be changed to "Vacuum Filter Beds" since asbestos has been eliminated from this operation.

#6. APC-79/128 - Exhaust System on Dry Bulk Asbestos Area

The title of this permit should be changed to "Exhaust System Mix Area" to reflect the elimination of the storage and use of asbestos in this area. We also feel that condition #1 of this permit should be changed to reflect the elimination of asbestos from this system, and the wording of the permit be changed to eliminate the use of the word "asbestos".

#7. APC-78/441 - Briquette Forming Ventilation

We feel that the wording of this permit should be changed to eliminate the use of the word "asbestos", to reflect the elimination of asbestos from this area. We also feel that condition #1 of this permit should be changed to a lesser requirement.

The first nine permits on the attached list (Nos. APC-78/137 through APC-78/145) expire February 3, 1981. A separate letter will be sent within the next few days requesting renewal of these nine permits.

(more)

ORIGINAL  
(Rec'd)  
HAVEG?

- 3 -

Thank you for your help in this matter. If you need any additional information, please contact me.

Very truly yours,

AMETEK/Haveg Division

*H. Dudley Barton* <sup>Tue</sup>

H. Dudley Barton  
General Manager

*Joseph W. Cregg*

By Joseph W. Cregg  
Plant Manager

HDB/JWC:gf

Attachment

cc: Mr. David Burke  
Air Resources Section  
Division of Environmental Control  
P. O. Box 1401  
Dover, DE 19901

Mr. Alan H. Simpson ✓  
Division of Environmental Control  
14 Ashley Place  
Wilmington, DE 19804

M E M O R A N D U M

TO: R. R. French

DATE: July 23, 1974

THRU: J. L. Hopkins

FROM: A. H. Simpson

SUBJECT: Operating Certificate Inspection - APC 74/113-C, APC 75/30-0

On July 17, 1974, I was accompanied by Haveg representative Frank Smiley on an operating certificate inspection of a high velocity dust collection system for control of fugitive asbestos and fiberglass dust. Such dust emanates in Haveg's machining and sanding departments. EPA representative Francis Alpheizer also carried out an inspection of the equipment at this time. Construction of this collection equipment was initiated by Haveg's old exhaust system not being able to meet EPA's baghouse design requirements for asbestos control.<sup>1</sup>

The new dust collection system captures asbestos and fiberglass dust from up to 25 separate sources within the machining and sanding areas. Dust is captured by means of high velocity pick-up hoses located only inches away from dust sources. Each of these pick-ups exhausts through one of three parallel Hoffman model 751 baghouses which are located outdoors.

During my inspection, the dust collection system was utilized at a typical number of operating sources. The 3500 ft/min. minimum indraft velocities were doing a good job of capturing fugitive dust. No visible emissions could be detected, even when standing right next to either baghouse stack outlet. Baghouse hopper dumping is continual and no emissions could be detected as a result of this operation.

<sup>1</sup> Federal Register, Vol. 38, No. 66, Section 61.23

AHS/jcw

cc: H. J. Menghi



M E M O R A N D U M

TO: R. R. French

DATE: February 1, 1977

FROM: A. H. Simpson

SUBJECT: January 24, 1977 Asbestos Release & Baghouse Failure at Haveg Industries

Reference: January 24, 1977 Field Report by Dennis Wallace

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At 11:30 a.m., Haveg representative Bob Good called the Wilmington Air Resources Office to report a baghouse failure. Operators started the machine shop ventilation system (APC 75/30-0) at 6:00 a.m. It was shutdown at 6:45 a.m. when it was discovered that one of the three Hoffman baghouses and one of the two exhaust blowers on the system had burned up. The cause of the incident is unknown.

Emissions may or may not have been released from the collapsing of the baghouse. APC 75/30-0 requires that no visible emissions leave the baghouses.

AHS/job

cc: W. Lawrence

## Telephone Log

ORIGINAL  
(300)From Brad L. Smith To Dolly Burton Date 3/28/90 Time 12:00Title General Manager Company AmtecPhone Number 995-0400 Follow-up \_\_\_\_\_Message: Mr. Burton provided the following  
history on the Amtec site:late 1800's - Site was used for an Iron  
works operation1906 - Site used to manufacture  
Volcanized Fibre. Pelican  
Fibre or Continental Diamond  
Fibre1933 - Hercules Corporation - owned  
by Continental Diamond Fibre  
which later became the Mill  
Company1955 - 1964 - Hercules Industries became  
its own entityOctober 8, 1980  
1964 - ~~1980~~ - Hercules purchased Haver  
as a subsidiaryOctober 8, 1980 - present - Amtec purchased site  
with Hercules retaining  
liability of products used  
disposed during their ownership  
(asbestos etc.)

## J. HACKNEY'S TELEPHONE LOG

Reference # 33

①

From Jimmie Hackney To \_\_\_\_\_ Date 9/5/89 Time 15:50  
Name John Holback Company Wilmington Sub Water Company  
Phone Number 792-2831 Follow-up \_\_\_\_\_

Message: \_\_\_\_\_

WSC has two surface water intakes  
at the Stanton Plant. One is at the  
confluence of the Red & White Clay Creek  
and the other intake is situated on the White  
Clay Creek.